

Amendments to the Claims

Please amend page 10, line 1 as follows:

Claims What is claimed is:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method ~~Method~~ for phenotyping of a human individual comprising determining *in vivo* protein activity and thereby obtaining a characteristic of said human individual, the determination comprising
 - a) hyperpolarising the NMR active nuclei of samples collected from a human individual preadministered with at least one probe compound containing at least one NMR active nuclei, and
 - b) analysing said samples by NMR spectroscopy.
2. (Currently amended) The method ~~Method~~ according to claim 1, wherein only one probe compound containing at least one NMR active nuclei is used.
3. (Currently amended) The method ~~Method~~ according to claim 1, wherein more than one probe compound containing at least one NMR active nuclei is used.
4. (Currently amended) The method ~~Method~~ according to ~~claims 1 to 3~~ claim 1, further comprising the step of determining wherein the activity of at least one of several proteins and/or isoenzymes is determined and thus obtaining a set of characteristics of said human individual ~~is obtained~~.
5. (Currently amended) The method ~~Method~~ according to ~~claims 1 to 4~~ claim 1, wherein the method is carried out for several human individuals and thus characteristics of said several human individuals are obtained.

6. (Currently amended) The method Method according to claim 5, further comprising the step of grouping wherein human individuals who exhibit the same or similar characteristics ~~are grouped~~.
7. (Currently amended) The method Method according to claim 6, further comprising the step of for phenotyping of a clinical trial group
8. (Currently amended) The method Method according to ~~claims 1 to 4~~ claim 1, further comprising the step of comparing wherein said characteristic of said human individual ~~is compared~~ with characteristics of other human individuals, ~~preferably having been obtained according to claim 6,~~ and thereby classifying said human individual into a group.
9. (Currently amended) The method Method according to claim 8, further comprising the step of for phenotyping of ~~said~~ human individual prior to said human individual receiving a ~~receives~~ therapeutic drug treatment.
10. (Currently amended) The method Method according to ~~claims 1 to 9~~ claim 1, wherein the at least one probe compound is enriched with NMR active nuclei.
11. (Currently amended) The method Method according to ~~claims 1 to 10~~ claim 1, wherein hyperpolarisation is carried out by means of polarisation transfer from a noble gas, brute force, dynamic nuclear polarisation (DNP) or spin refrigeration.
12. (Currently amended) The method Method according to ~~claims 1 to 11~~ claim 1, wherein the collected samples are biofluids.
13. (Currently amended) The method Method according to ~~claims 1 to 12~~ claim 1, wherein the protein activity to be determined is the activity of a protein selected from the group consisting of NADPH quinone oxireductases, CYP450, N-acetyltransferase, glutathione transferase, thiomethyltransferase, thiopurine

methyltransferase, pseudocholinesterase, sulfotransferase, UDP-glucuronosyl transferase, serotonin transport protein, ATP binding cassette (ABC's) and p-glycoprotein.

14. (Currently amended) The method ~~Method~~ according to ~~claims 1 to 13~~ claim 1, wherein the at least one probe compound is a substrate, inducer or inhibitor for Cytochrome P 450 (CYP450)
15. (Currently amended) The method ~~Method~~ according to claim 14, wherein the at least one probe compound is a substrate, inducer or inhibitor for a CYP 450 isoenzyme selected from the group consisting of CYP1A2, CYP2A6, CYP2C8/9, CYP2C19, CYP2D6, CYP2E1 and CYP3A4.
16. (Currently amended) The method ~~Method~~ according to ~~claims 1 to 15~~ claim 1, wherein the at least one probe compound is selected from the group consisting of phenacetin, coumarin, tolbutamide, phenytoin, mephenytoin, S-mephenytoin, bufuralol, chlorzoxazone, midazolam, caffeine, dapsone, diclofenac, debrisoquine, bupropion, antipyrine, dextromethorphan, warfarin, diazepam, alprazolam, triazolam, flurazepam, chlodiazepoxide theophylline, phenobarbital propranolol, metoprolol, labetalol, nifedipine, digitoxin, quinidine, mexiletine, lidocaine, imipramine, flurbiprofen, omeprazole, terfenadine, furafylline, codeine, nicotine, sparteine, erythromycin, benzoylcholine, butrylcholine, paraoxon, para-aminosalicylic acid, isoniazid, sulfamethazine, 5-fluorouracil, trans-stilbene oxide, D-penicillamine, captopril, ipomeanol, cyclophosphamide, halothane, zidovudine, testosterone, acetaminophen, hexobarbital, carbamazepine, cortisol, oltipraz, cyclosporin A and paclitaxel.